

# OPERATIONAL WASTE MANAGEMENT PLAN (OWMP)

### **NEW PRIMARY SCHOOL AT MURRUMBATEMAN**

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### DISCLAIMER

This report is based on information provided by Hansen Yuncken Pty Ltd.

To that extent, this report relies on the accuracy of the information provided to the consultant. This report is not a substitute for legal advice on the relevant environmental related legislation, which applies to businesses, contractors or other bodies. Accordingly, EcCell Environmental will not be liable for any loss or damage that may arise out of this project.

DOCUMENT CONTROL						
ISSUE NUMBER	ISSUE NUMBER DATE COMMENTS AUTHOR					
VERSION 01	14/05/2021	First issue	Simon Lunn	Jo Drummond		
VERSION 1.1	7/06/2021	Minor text update to the transport of various waste streams	Simon Lunn	Jo Drummond		
VERSION 1.2	16/08/2021	Updated Appendices	Simon Lunn	Jo Drummond		



### 1 INTRODUCTION

This Operational Waste Management Plan (OWMP) accompanies an Environmental Impact Statement (EIS) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) in support of an application for a State Significant Development (SSD-11233241).

The development is for a new primary school located at 2 Fairley Street, Murrumbateman.

This report addresses the relevant Secretary's Environmental Assessment Requirements (SEARs), namely:

• SEARs 18

The purpose of this OWMP is to:

- Detail the type and quantity of waste to be generated during operation of the development;
- Advise the appropriate waste storage, source separation and collection facilities to maximise recovery of recyclables;
- Ensure waste management facilities are:
  - o safely and easily accessible to occupants and service providers; and
  - o appropriately sized for storage of the expected waste.
- Describe the handling, storage and disposal of all waste streams generated on site;
- Minimise adverse impacts to health, environmental and safety associated with handling and disposal of waste and recycled material;
- Discourage illegal dumping and prevent large quantities of waste piling up by describing appropriate onsite storage and removal services; and
- Help facilitate diversion from landfill targets of 75% of all waste generated as per the requirements of *NSW Waste Resource and Recovery Act 2014,* with scope to reach an aspirational target of 85% in anticipation of future mandatory targets as indicated in the *Cleaning Up Our Act: The Future for Waste and Resource Recovery in NSW. Issues Paper 2020.*

### 1.1 PROJECT SUMMARY

### The Proposal

The proposed development is for construction and operation of a new primary school with Core 21 facilities in Murrumbateman that will accommodate up to 368 students.

The proposed development includes:

- A collection of 1-2 storey buildings containing 14 home base units, 2 special education learning units, hall, administration facilities and library.
- On-site parking lot and kiss-and-ride area.
- Outdoor sports court and play area.



• Integrated landscaping, fencing and signage.

### Site Description

The site is located at 2 Fairley Street, Murrumbateman, in the local government area of Yass Valley Council. The site is formally described as Lot 302 DP1228766 (refer to Figure 1). The site is irregular in shape and has an area of 15,434.92m<sup>2</sup>.

The site is located at the northern end of the Murrumbateman village, which is characterised by a mix of uses including low density residential and some commercial.

Immediately surrounding development includes a tourist hotel to the north across Fairley Street, Murrumbateman Library (located in the former Murrumbateman schoolhouse, a local heritage item) to the south, a medical centre and childcare centre to the west, and rural land and equestrian facilities to the east across Barton Highway. There is also a cycling and equestrian pathway to the south between the site and library.

The site contains an existing parking lot in its northern end and a driveway along its western boundary. There is also a mound of soil at the southern end of the site. The site is otherwise cleared and vacant.



Figure 1 - Site aerial photograph (Source: Nearmap)

The breakdown of areas for each new building is shown in Table 1.



### Table 1 - Building breakdown by area

GFA - BLOCK A	
<b>BUILDING / LOCATION</b>	AREA
	250.00
GFA - BLOCK A - LEVEL 00	350.30 m <sup>2</sup>
GFA - BLOCK A - LEVEL 01	435.68 m <sup>2</sup>
	785.98 m²
GFA - BLOCK B	
BUILDING / LOCATION	AREA
GFA - BLOCK B - LEVEL 00	553.67 m <sup>2</sup>
GFA - BLOCK B - LEVEL 01	484.26 m <sup>2</sup>
	1037.92 m <sup>2</sup>
GFA - BLOCK C	
BUILDING / LOCATION	AREA
	445 50
GFA - BLOCK C - LEVEL 00	415.50 m <sup>2</sup>
GFA - BLOCK C - LEVEL 01	415.50 m <sup>2</sup>
	831.00 m <sup>2</sup>
GFA - BLOCK D	
<b>BUILDING / LOCATION</b>	AREA
	070.07
GFA - BLOCK D - LEVEL 00	679.97 m <sup>2</sup>
	679.97 m <sup>2</sup>

These figures are based on design drawings provided by Pedavoli Architects Pty Ltd.

### 2 LEGISLATIVE REQUIREMENTS AND GUIDELINES

### 2.1 LEGISLATION AND REGULATIONS

Guidance documents and policies considered in the preparation of this OWMP are included below:

- NSW Environment Protection Authority (EPA) Waste Classification Guidelines 2014;
- NSW EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities 2012;
- NSW EPA's Waste Avoidance and Resource Recovery (WARR) Strategy 2014-21 with expected future guidelines to replace this during the construction and operation phases of the development;
- Green Star Design & As Built Credit Criteria;



- State Significant Development Application SSDA;
- Educational Facilities Standards & Guidelines (EFSG) NSW Updated 2020; and
- Yass Valley Local Environmental Plan (LEP) 2013.

### 2.2 STANDARD SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEARS)

This OWMP meets the general standards of the SEARs as listed in Table 2.

### Table 2 - SEARs Requirements

	Action Requirement		OWMP Document Ref.
1.	Classify	Identify, quantify and classify the likely waste streams to be generated during construction and operation.	Table 4
2.	Describe	Describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Section 4
3.	ldentify	Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Section 5

### 2.3 EDUCATIONAL FACILITIES STANDARDS AND GUIDELINES (EFSG)

The EFSG section DG02 Ecologically Sustainable Development 2.7.2 Operational Waste requires new and refurbished schools to establish operational waste targets. The minimum targets adopted for the operation of waste for this school reflects those from NSW Waste and Resource Recovery Strategy 2014-21, released in December 2014 which are to:

- 1. increase recycling rates to 70% for municipal solid waste; and
- 2. increase total waste diverted from landfill to 75%.

By setting realistic achievable goals, targets and performance, the OWMP is more likely to succeed, and the school is able to report on waste diversion and reduction targets in line with the Department of Education's waste contract and comply with State Significant Development conditions. Examples of key performance indicators that may be relevant include:





### 2.4 GREEN STAR DESIGN & AS BUILT 08A AND 08B

### Aim of Credit

To recognise projects that implement waste management plans that facilitate the re-use, recycling, or conversion of waste into energy, and stewardship of items to reduce the quantity of outgoing waste.

### Table 3 - Green Star Requirements

	8A PERFORMANCE PATHWAY					
Separation of waste streams	<ul> <li>The following waste streams must be provided with separate bins or containers: <ul> <li>general waste;</li> <li>paper and cardboard;</li> <li>glass;</li> <li>plastic; and</li> <li>at least one other waste stream.</li> </ul> </li> <li>Advice from the Green Building Council of Australia GBCA indicates that where the waste collection service collects recyclables as a comingled stream, the requirement to provide separated waste streams for these recyclables is removed.</li> <li>This is permissible to the extent of comingling accepted by the waste collection service. For example, if glass and plastic are collected as comingled, then paper and cardboard is still required to have a separated waste stream.</li> </ul>	<ul> <li>This OWMP outlines provision for the management and collection of the following waste streams:</li> <li>general waste;</li> <li>paper and cardboard;</li> <li>soft plastics;</li> <li>comingled recycling;</li> <li>Container Deposit Scheme (Return &amp; Earn); and</li> <li>food / organics;</li> <li>Separate bins will be provided for each waste stream stored in a central waste storage area and bins will be clearly marked, except for Return &amp; Earn bottles which will be securely stored to deter potential theft and trespassing.</li> </ul>				
Dedicated Waste Storage Area	Two dedicated and sufficiently sized areas for the storage and collection of the applicable waste streams shall be provided.	<ul> <li>Calculations for the waste storage area (Table 8)</li> <li>for the school have been carried out based on: <ul> <li>school areas and number of students attending the school;</li> <li>collection method and materials handling requirements of each stream;</li> <li>collection frequency for each waste stream;</li> <li>projected tenancy structure impact on the waste collection services supply chain; and</li> <li>hygiene, cleanliness and aesthetic aspects to the benefit of the development.</li> </ul> </li> </ul>				
Access to Waste Storage Area	<ul> <li>Access requirements for waste collection areas must adhere to best practices.</li> <li>These access arrangements must be as outlined within third-party Best Practice Guidelines.</li> <li>Best Practice Guidelines outline the following requirements: <ul> <li>The access pathway for wheeling bins between a central waste storage point and the collection point must be level and free of steps or kerbs.</li> <li>The maximum manual handling distance between the storage point and the collection point and the collection point is between the storage point and the collection point and the collection point and the collection point for mobile garbage bins is 20 meters.</li> </ul> </li> </ul>	The access pathway for transporting waste from the school building facilities to the waste storage area is level and easily accessible via cleaning trolleys. The waste collection point is located adjacent to the waste storage area as shown in Appendix A. Vehicle swept paths and parking location are provided in further detail in the traffic management plan.				



### 3 WASTE GENERATION

### 3.1 WASTE TYPES

The NSW EPA Waste Classification Guidelines (NSW EPA, 2014a) groups wastes that pose similar risks to the environment and human health, as defined in the Protection of the Environment Operations Act 1997. The primary waste streams expected to be generated and corresponding EPA classifications for the ongoing operation of the development are summarised in Table 4.

EPA Classification	Waste Stream	Waste Type	Bin Colour	Waste Management
General solid		Food Organics	Lime Green	Food waste bin
waste (putrescible)	Organics	Garden Organics	N/A	Composted on site or removed as required by greenskeeper/arborist
		Metals (steel, aluminium, stainless) Hard Plastics (recyclables) Glass	Yellow	Comingled recycling bins
General solid	Recycling	(bottles, containers, jars) Soft Plastic (plastic bags, bread bags, bubble wrap, plastic wrappers, etc.)	Dark Green	Soft plastic recycling bins
waste (non- putrescible)		Return & Earn Plastic Bottles (ONLY containers with the 10c refund label)	White	Container Deposit Scheme
		Paper (excluding paper towels, toilet paper & tissues) Cardboard	Blue	Paper & Cardboard recycling bins
	General	(excluding waxed cardboard) Non-recyclable Plastics (Dirty/contaminated plastic) General refuse	Red	General waste bins

#### Table 4 - Potential Waste Types and Classifications & AS 4123.7 Waste Storage Requirements



EPA Classification	Waste Stream	Waste Type	Bin Colour	Waste Management
		Chemical liquid & solid waste		Science department to manage storage, collection and Material Safety Data Sheets (MSDS)
		Nespresso pods and capsules		Collected by Nespresso
Potentially hazardous	Other	Sanitary waste (including feminine hygiene products, nappy waste)	N/A	
waste		Lead-acid or nickel-cadmium batteries		Collected by an appropriate contractor or sub-contractor
		secure destruction (of sensitive documents)		as defined in the buy.NSW Contract 9698 agreement
		Used printer cartridges		
		e-waste		

Designers must refer to EFSG - AS 4123.7 for colours, markings, and designation requirements for further guidance on bin colour, waste stream and waste type.

### 3.2 WASTE HIERARCHY



### Figure 2 - Order of the Waste Hierarchy

The EFSG requires new and refurbished schools to identify opportunities for reuse and recycling in the operation of the facilities. Table 5 indicates waste management practices that should be adopted in accordance with the *Waste Avoidance and Resource Recovery Act* 2001 (NSW EPA, 2014).



### Table 5 - Implementing the Waste Hierarchy

#### Implementing the Waste Hierarchy

### Avoid / Reduce

Reduce general waste at the source, determine changes in returnable delivery systems including packaging and purchasing.

Require suppliers to use stackable/returnable/reusable boxes instead of disposable cardboard boxes.

Reduce consumption of resources that have the potential to become waste through strategies such as green purchasing - purchasing items with reusable, recyclable, have no packaging or are biodegradable.

Examining all processes to determine where wastes are produced and to devise measures for waste prevention or reduction.

Devising ways of reducing waste with students so they too can share in the savings (i.e. rewards for students who reduce waste).

Partnering with others to assist with waste minimisation.

Keeping track of changes and improvement.

#### Reuse

Set up a reuse area for excess materials and promote the contribution and reuse of excess food.

Donate old (useable) computer/electrical equipment, furniture and fittings to staff, charities, or sell at auction.

Implement the Enviro Bank program for bottles and cans.

Reusing drums, cartridges and containers where possible.

Selling or donating usable waste materials to other organisations.

### Recycle

Introduce recycling systems for major waste streams generated onsite including:

- Paper and cardboard;
- Food / Organics;
- Soft Plastics;
- Bottles and cans; and
- Packaging and plastics.

Modify or refresh signage on recycling bins or in recycling areas to promote correct recycling practice.

Provide regular information and education to staff on appropriate usage and recycling bins.

Investigating alternative uses for organic waste that cannot be reduced or reused (i.e. composting, bio-gas from waste, digester, etc.).

Provision for a bin station at a central location in school with the option of source separation and clear waste signage to ensure source separation.

Explore opportunities for recycling waste types not included in the mandatory stream separation (i.e. batteries, coffee cups, e-waste, etc.)

#### Waste Disposal

Students, staff and cleaners dispose of waste in accordance with the Waste Management Policy.

#### Monitoring and assessment

Request waste contractor to provide monthly data and reporting on recycled and materials sent to landfill.



### 4 WASTE ESTIMATES

### 4.1 ESTIMATE OF QUANTITIES

As there is no reference in Yass Valley Local Environmental Plan (LEP) 2013 waste strategies for schools, a desktop assessment of waste generated from the following similarly structured schools with a variety of student numbers to provide indicative waste volumes, was conducted.

# Table 6 - Weekly waste generation (Litres/week) across different schools currently operating in the wider Sydney area

School	# Students	General	Recyclable
Parramatta Public School	600	6000	2400
Pendle Hill High School	450	4500	Not Determined
Mainsbridge School	130	1980	1920
Erskine Park High School	1011	6000	1500

### **Erskine Park High School**

In addition, an in-depth review of waste material composition was estimated based on the results of the Erskine Park High School Waste Audit 2019 conducted by APC Waste Consultants in collaboration with the Department of Education. The waste assessed through this audit was considered to be representative of waste that will be generated at the new primary school at Edmondson Park and formed the basis for the waste generation estimates. The rates adopted are as follows:

Table 7 – Adopted	waste generation rates
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School Waste Type	L/Per student/wk.
Paper Cardboard	1.602
Co-mingled	1.662
Soft Plastic	1.484
Return & earn	0.178
Organics	0.297
General	2.196

### 4.2 ESTIMATE OF QUANTITIES

To derive indicative quantities of waste, the following assumptions have been applied:

- The occupancy rate = 5 days per week (with students present during the NSW DoE designated active term dates);
- Number of students proposed = 368;
- Reference was made to the waste generated from schools listed in Table 6 & Table 7;
- Weekly collection has been assumed for general waste & food / Organics;
- Fortnightly collection has been assumed for all other waste types; and
- The final frequency of waste collection will be made once final waste contractor agreements are in place.



### Table 8 - Waste Generation Estimates

Material Type	Collection Vol.	Bin Volume (L)	# Bins	Bin Area (sqm)
Paper Cardboard	1179	1100	2	2.32
Comingled	1223	1100	2	2.32
Soft Plastic	1092	1100	1	1.16
Organics	131	240	1	0.43
Return & earn*	109	120	1	0.27
General	808	3000	1	2.50
			Bin Area Total	9.00

### 4.3 STORAGE AREA SIZE ESTIMATES

The waste storage area will be sized to accommodate all bins or containers, for all applicable waste streams, for at least one collection cycle.

### Table 9 - Waste Storage Area - Estimated Requirements

### Minimum suggested waste storage size - including circulation space ~24 m<sup>2</sup>

### 4.4 WASTE STORAGE AREA

The nominated waste storage area is to be in the southwest corner of the carpark as shown in APPENDIX A. The area must be suitably screened using materials such as walls, fencing, natural shrubs or a hedge row.

### 4.5 WASTE FACILITIES CONSTRUCTION / MAINTENANCE

Responsibility for cleaning of waste storage area and service compartments will be designated to the cleaning staff. The basic requirements for waste storage area are as follows:

- To be of adequate size;
- Integrated with building design and site landscaping;
- Suitably screened from public areas;
- Area to be level, with appropriate access for collection;
- Assurance that OH&S requirements for waste contractors are met;
- Colour coded bins to be provided throughout to collect different waste streams;
- Access to waste enclosure to be safe, convenient to all users and to meet WorkCover NSW Occupational Health and Safety guidelines;
- Waste enclosure to conceal bins from view from the street; and
- Bins to be covered against birds, vermin and vandals.



### 5 WASTE MANAGEMENT

### 5.1 WASTE STORAGE SYSTEMS

It is anticipated that a combination of Bulk Bins and Mobile Garbage Bins (MGBs) will be utilised within the school. The bulk bin will be used for general waste and MGBs will be used for each remaining waste streams as shown in APPENDIX B.

Small quantities of hazardous wastes may be generated (e.g. light bulbs, e-waste, batteries, oil, chemicals or paint). Separate containers for the safe storage of these wastes in the school will be provided where applicable in the waste storage area or another applicable storage area within the school. These materials will be collected by an appropriate contractor or sub-contractor as defined in the buy.NSW Contract 9698 agreement.

### 5.2 WASTE MOVEMENT

It is anticipated that staff, students etc will dispose of waste directly into various streams (general, paper/cardboard, comingled recycling, soft plastics, container deposit scheme and food/organics) located in the offices, canteen, classrooms and open space playground prior to collection by the cleaners. Each waste stream will have small labelled and separate waste bins. Waste from these small bins will be then transported by cleaning contractors via the nominated egress corridors/pathways to the waste storage area the waste material will be combined into larger bins ready for collection by the waste contractor.

### 5.3 WASTE COLLECTION POINT

The nominated waste storage area is to be in the southwest corner of the carpark as shown as shown in APPENDIX A. The appointed waste contractors will collect each waste stream from the loading bay at nominated times in accordance with the relevant waste contract. The collection area is sufficiently sized to accommodate waste contractor vehicles in accordance with the specifications in the *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (EPA 2012).* The nominated waste collection point is within the boundary of the site and not within a public place.

### 5.4 VEHICLE MOVEMENTS

Medium or Heavy Rigid Vehicles (MRV/HRVs) will collect the bins from the waste storage area on collection days. Swept paths and access pathways are shown in APPENDIX C. This will be done in such a manner as to minimise risk of damage to the roadway, footpath or services under the ground. Waste collection vehicles will not obstruct access to adjacent premises, roadways, the footpath or the primary pedestrian entrances to the school. In addition, waste collection will be carried out with due care for public safety including other road users, cyclists and pedestrians.



The waste storage area must be located such that the following vehicles can gain access:

- Medium Rigid Vehicle (MRV) (size in m = 8.8 long x 2.5 wide x 4.5 high);
- Heavy Rigid Vehicle (HRV) (size in m = 11 long x 2.5 wide x 4.25 high);

Other points to note include:

- Different waste streams are collected by separate trucks at separate times/days;
- Swept path diagrams in more detail to be provided by traffic consultant;
- Concrete slab / carpark able to support the weight of a loaded truck and bins/skips; and
- The collection truck to enter and leave school in a forward direction.

### 5.5 COLLECTION HOURS

The waste collection truck will schedule collection out of school hours to reduce any risk from the truck and bin movements to the school and preschool children. The collection of waste and/or any recycling must only occur after 6 am and before 7 pm on school days to minimise noise disturbance to nearby residents. As the waste storage area is accessed via the staff carpark, ideal waste collection time will be between 7am and 7.30am.

### 5.6 CONTRACTORS

A contract with a licensed waste contractor for the removal of all waste, will be arranged prior to an occupation certificate or commencement of use (earlier of the two). The contract should also include provisions for the collection of potentially hazardous waste including e-waste.

### Waste management service contract

Schools must use Contract 9698 in buy.NSW website. This contract is mandatory and covers waste management services (bins, collection, transport, processing, treatment and disposal).

### 5.7 SEGREGATING WASTE

Waste will be segregated into separate streams (general, paper/cardboard, comingled recycling, soft plastics, container deposit scheme and food/organics) at the point of generation. Effective segregation is best achieved through:

- Education and training to all staff, contractors, visitors and students who generate waste, such as the waste wise schools program;
- Ensuring identifiable colour coding and labelling of bins for each waste stream is implemented and maintained;
- Ordering and provision of suitable containers at appropriate locations;
- Incorporation of quick and efficient waste disposal methods into staff areas; and
- Ensuring all waste can be easily, safely and correctly segregated at the point of generation, for instance including appropriate bins in food preparation and administrative areas.



### 6 ONGOING MANAGEMENT

This OWMP forms the basis of operational waste management on site for the school. It is a living document which will be reviewed and revised to provide increased accuracy of waste generation estimates and to ensure appropriate onsite waste management in accordance with current and future waste management regulations. Compliance by the administrative manager, staff, cleaning contractors and waste collection contractor is essential to ensure the efficiency of the system. As such, all stakeholder engaging with the OWMP will need to maintain awareness of any new relevant guidelines and regulations that come into effect during the operational phase of the development.

### 6.1 SIGNAGE

Signage will be provided in all waste disposal, storage and collection areas demonstrating how to use the waste management system, including what materials are acceptable in each bin. All waste streams will be stored in clearly labelled, colour coded bins as appropriate to ensure that waste streams are not inadvertently mixed. Signage will be prepared and located on site in accordance with the Australian Standard (AS 1319) for safety signs, and the NSW EPA and Australian Standard for recycling signage. Examples of signage are shown in APPENDIX D.

The provision of space must include source separation, including bin stations and appropriate signage of waste and receptacles for multiple waste streams. Designers must refer to AS 4123.7 Mobile waste containers - Colours, markings, and designation requirements for further guidance on bin colour, waste stream and waste type.

Bin Colour	Waste Stream	Waste type
Lime Green	Organics	Food Organics and Garden Organics
Yellow	Recycling	Comingled Containers
Blue	Recycling	Paper and Cardboard
White	Recycling	Container Deposit Scheme
Any colour	Recycling	Soft Plastic
Red	General	General Waste

### Table 10 - AS 4123.7 Waste Storage Requirements

### 6.2 EDUCATION & TRAINING

The school will aim to build a strong culture of waste reduction and recycling through regular waste management updates at assemblies, student gatherings, Parents and Citizens (P&C) meetings, staff inductions and meetings, ideally within an effective framework such as the waste wise schools program.



### 6.3 ROLES & RESPONSIBILITIES

It is expected that all personnel will commit to the OWMP and be responsible for their own actions in adhering to the waste management objectives.

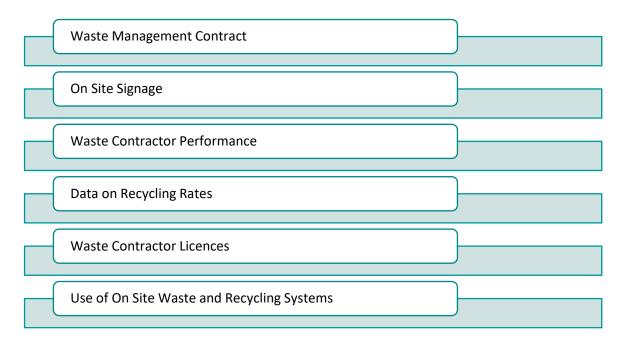
Table 11 - Roles and Responsibilities

Responsibility	Activity	Monitoring
Administrative Manager	<ul> <li>Ensuring staff (and students) are inducted into the OWMP and other applicable management plans.</li> <li>Responsible for undertaking procurement of operational materials in accordance with the waste management hierarchy.</li> <li>Segregation of waste streams where required to ensure appropriate use, treatment and/or disposal.</li> <li>Compliance with applicable environmental legislation and project conditions.</li> <li>Ensure environmental management plan(s) across the site are adhered to and accurate to site conditions.</li> <li>Maintenance of waste-related signage, colour coding and MGBs.</li> <li>Security of waste storage area during day-to-day business.</li> <li>Ensure no waste is placed on the public way.</li> <li>Promoting and enabling compliance with the OWMP by other stakeholders (cleaners, staff, students etc.) through delivery of positive waste management culture at the school.</li> </ul>	Monitor contractors and cleaners for compliance to the OWMP.
Cleaners Removing Material	<ul> <li>Responsible for acting in accordance with the OWMP.</li> <li>Transfer of waste within the school.</li> <li>Transfer of MGBs to the nominated waste storage area and return of MGBs to waste school areas.</li> <li>Clean areas around waste storage area.</li> <li>Ensure no waste is placed on the public way.</li> </ul>	Ensure there is no contamination in comingled bins.
Staff	<ul> <li>Adherence to the OWMP.</li> <li>Placement of waste/recycling within correct bins.</li> <li>Notify manager/cleaning contractor when bins are overfull and require transport to the MGBs.</li> <li>Informing the Administrative Manager of any waste management incidences.</li> <li>Reinforcing positive waste management culture as defined by administrative manager amongst colleagues and students.</li> </ul>	Ensure there is no contamination in comingled bins.
Students	<ul> <li>Responsible use of waste facilities and appropriate disposal of waste.</li> <li>Encourage BYO for the following items: water bottles, containers, straws, reusable utensil sets, washable hand towel, carry bag and coffee cups.</li> <li>Engaging with positive waste management culture as delivered by teachers.</li> </ul>	Educate students and inform about the school's waste management initiatives and that the goals and targets are clearly communicated.
Waste Contractors	<ul> <li>Acknowledge and comply with waste targets.</li> <li>Use reasonable endeavours to assist reaching the waste targets.</li> <li>Provide feedback on actual volumes of waste and recycling collected to enable waste volume evaluation by Administrative Manager.</li> </ul>	Quantify the amount and types of waste. Monitor, report and address contamination through regular monitoring/bin inspections.



### 7 REVIEW PROCESS

School Management will undertake regular reviews of the Operational Waste Management Plan including the following indices:





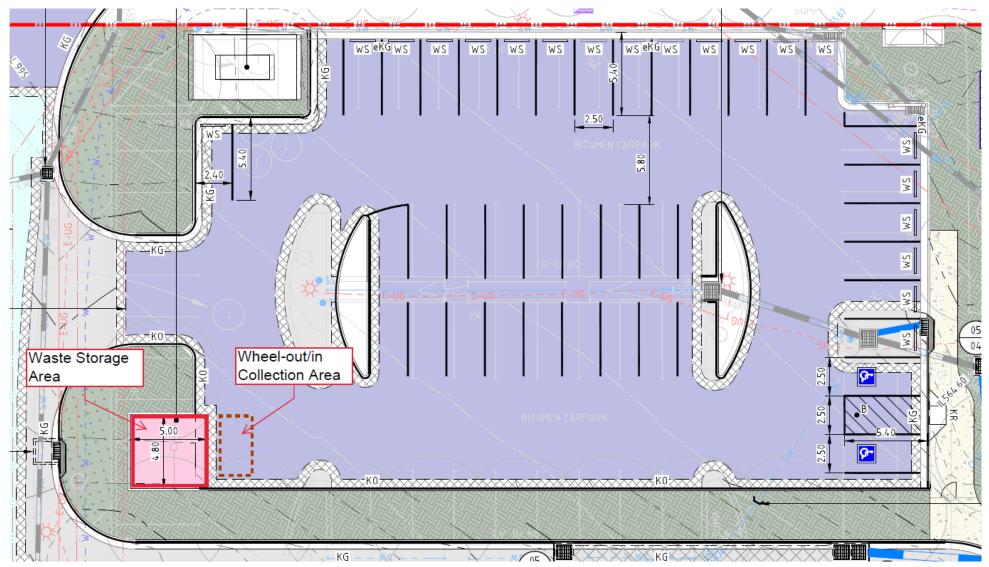
### 8 LIMITATIONS

This report documents an Operational Waste Management Plan (OWMP) as part of the SSDA with the following limitations:

- Estimates and details contained in this waste management plan have been prepared by analysing the information, plans and documents supplied by the client, and third parties including Council and government information;
- The figures presented in the report are an estimate only the actual amount of waste generated will be dependent on the occupancy rate and waste generation intensity as well as the approach to educating visitors, staff and students regarding waste management operations and responsibilities;
- The School Administrative Manager will make adjustments as required based on actual waste volumes (if waste is greater than estimated) and increase the number of bins and collections accordingly;
- The report will not be used to determine or forecast operational costs or prepare any feasibility study or to document any safety or operational procedures;
- This OWMP has been prepared with reference to applicable legislation, regulations and guidelines in effect at the time of writing and no guarantee can be made that the recommendations provided will remain compliant with future mandatory requirements during the operational lifespan of the development;
- The report has been prepared with all due care, however, no assurance or representation is made that the OWMP reflects the actual outcome and EcCell will not be liable for plans or outcomes that are not suitable for the purpose of the project, whether as a result of incorrect or unsuitable information or otherwise; and
- EcCell offer no warranty or representation of accuracy or reliability of the OWMP unless specifically stated.



### **APPENDIX A – WASTE STORAGE AREA LOCATION**

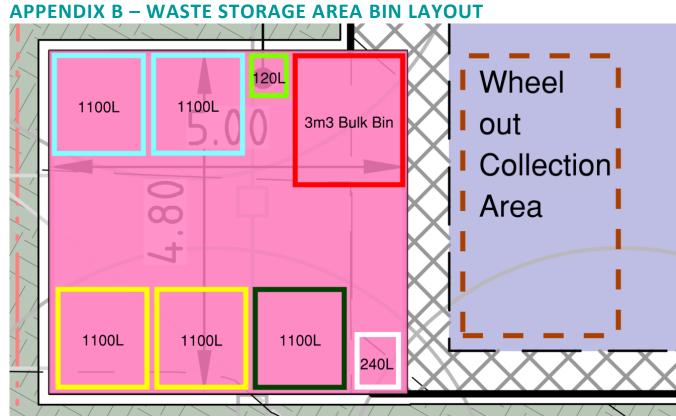


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Reference: OWMP\_MPS\_V1

Revision #: V1

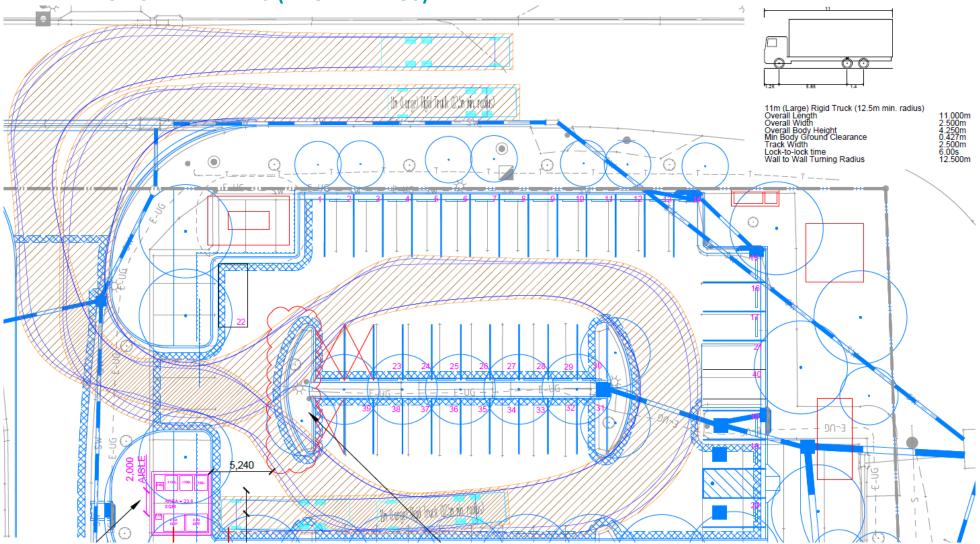




Bin Colour	Waste Stream	Waste type
Lime Green	Organics	Food Organics and Garden Organics
Yellow	Recycling	Comingled Containers
Blue	Recycling	Paper and Cardboard
White	Recycling	Container Deposit Scheme
Dark Green	Recycling	Soft Plastic
Red	General	General Waste



**APPENDIX C – SWEPT PATHS (12.5M RADIUS)** 



EcCell Environmental Pty Ltd 2021

Reference: OWMP\_MPS\_V1



### **APPENDIX D – EXAMPLES OF APPROPRIATE WASTE SIGNAGE**





# **Mixed Recycling**

